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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,893	08/25/2003	Yasuhiko Ikeda	03500.017523.	1238
5514	7590	06/16/2005	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO			NGUYEN, THINH H	
30 ROCKEFELLER PLAZA			ART UNIT	
NEW YORK, NY 10112			PAPER NUMBER	
			2861	
DATE MAILED: 06/16/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/646,893	<b>Applicant(s)</b> IKEDA ET AL.	
	<b>Examiner</b> Thinh H. Nguyen	<b>Art Unit</b> 2861	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5 and 6 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>5/10/04</u> . | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statement (IDS) submitted on December 12, 2003 is being considered by the examiner.

### ***Claim Rejections - 35 USC § 112***

2. Claim 5 is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claimed language "the upward and downward movement of said code strip" is not positively recited and appears contradicting to the claim 1 where movement is rendered by the position sensor.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. (U.S.6,629,787) in view of Gaarder. (U.S.6,137,508)

Lee, in regarding claims 1, discloses the instant claimed recording apparatus (100) comprising:

a carriage (30) carrying a recording head (4a) thereon and reciprocally scanning along a recording material;

a position detecting sensor (40) disposed on said carriage for detecting a position of said carriage;

a receiver for receiving signal transmitted by said position detecting sensor (col.5, lines 13-15);

a guide shaft (2) providing a guide for the scanning of said carriage; and

a guide shaft lifting mechanism (140; see fig.8) for moving up and down said guide shaft to thereby change a height position of said carriage.

Lee does not show the code strip to be read by the position detecting sensor, and subject matter regarding to the remaining claims

However, Gaarder (col.3, lines 50-61) disclose one of the well known types position detecting sensor (reader/encoder) which can be mounted in the back of the carriage.

The reader and the encoder strip communicates to with other to determine the location of the carriage. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the position detecting sensor as taught by Gaarder in Lee for the purpose of locating the position of the print carriage and thereby to determine the position of the print carriage relative to the print medium when said guide shaft is moved up and down and when said carriage moves up and down said code strip.

Regarding claim 2, the vertical slot (112) as shown in Gaarder enables the encoder moving up and down said encode strip;

at an ordinary height or any other height, regarding claim 3, it is understood that said carriage and the lower end portion of said code strip do not contact with each other;

wherein the upward and downward movement of said code strip is effected only near said position detecting sensor.

wherein said position detecting sensor is a photosensor (characterized by optical sensor).

#### ***Allowable Subject Matter***

5. Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The teaching relied upon by the Examiner do not suggest the code strip has one end thereof mounted with tension given thereto by a resilient member. These limitations are neither suggested nor taught by the prior art of record, alone or in combination as claimed.

#### ***Patent Application Information Retrieval (PAIR)***

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you

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have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

### **Contact Information**

8. Any inquiry concerning this communication should be directed to examiner Thinh Nguyen at telephone number (571) 272-2257. The examiner can generally be reached Mon-Wed, and Thurs from 9:00A – 5:00P. The official fax phone number for the organization is (703) 872-9306. The examiner supervisor, Dave Talbott, can also be reached at (571) 272-1934.

Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is (703) 308-1782.



Thinh Nguyen  
June 9, 2005

**Thinh Nguyen**  
**Primary Examiner**  
**Technology Center 2800**